

No. 721,870.

PATENTED MAR. 3, 1903.

T. A. EDISON.
FUNNEL FOR FILLING STORAGE BATTERY CANS OR ANALOGOUS
PURPOSES.

APPLICATION FILED NOV. 28, 1902.

NO MODEL.

Fig. 1

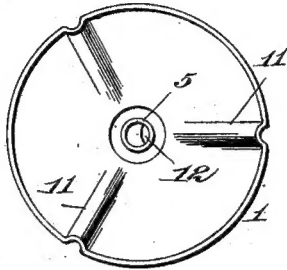
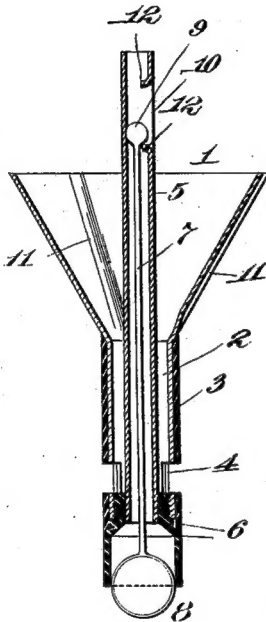


Fig. 2



Witnesses:

Jos. F. Coleman
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UNITED STATES PATENT OFFICE.

THOMAS A. EDISON, OF LLEWELLYN PARK, NEW JERSEY.

FUNNEL FOR FILLING STORAGE-BATTERY CANS OR ANALOGOUS PURPOSES.

SPECIFICATION forming part of Letters Patent No. 721,870, dated March 3, 1903.

Application filed November 28, 1902. Serial No. 133,113. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. EDISON, a citizen of the United States, residing at Llewellyn Park, Orange, in the county of Essex and State of New Jersey, have invented a certain new and useful Improvement in Fun-

nels for Filling Storage-Battery Cans or Analogous Purposes, of which the following is a specification.

My invention relates to an improved funnel, which has been designed specially for filling the can of my new storage battery, and my object is to provide a device for the purpose, and by means of which a visual indication will be given when a sufficient amount of fluid has been introduced thereby.

In the drawings, Figure 1 is a plan view, and Fig. 2 a vertical sectional view, of the improved device.

In both of the views corresponding parts are represented by the same reference-numerals.

The funnel comprises a tapered body 1 and a cylindrical neck 2, the latter being preferably covered with a layer of hard rubber 3, arranged to be introduced within the filling-tube of the storage battery. The neck 2, with its outer lining, is formed with openings 4 therein, through which the liquid passes.

Mounted within the neck 2 is a tube 5, secured at its lower end within a plug 6, made of hard rubber and screwed in place. Mounted within the tube 5 is a light rod 7, made preferably of glass, having a bulb 8 at its lower end and a head 9 at its upper end, the latter being disclosed through an opening 10 in the tube 5. Ordinarily the head 9 is tinted with some contrasting color, so as to be readily observable. Air from the can during the introduction of a liquid therein is permitted to escape through the channels 11. Vertical movement of the float 8 is limited in any suitable way—as, for instance, by providing the tube 5 on each side of the sight-opening 10 with lugs 12 12, with which the head 9 engages.

In using the device, the neck is introduced within the filling-tube of the battery and the desired liquid poured therein. When the

proper level is reached, the float 8 will be elevated, indicating the fact to the operator. In this way the liability of flooding the cells is prevented, which is especially desirable in batteries employing strongly-alkaline solutions, which would otherwise cover the tops of the cells, making them objectionable to handle and greatly increasing the danger of short-circuiting.

Having now described my invention, what I claim is—

1. The combination with a funnel having a discharge through the wall of its neck, of a plug closing the lower end of the neck, a tube carried by said plug and extending up through the neck and body of the funnel, a rod mounted in said tube, and a float carried by the lower end of the tube and protected by the plug, substantially as and for the purposes set forth.

2. The combination with a funnel having a discharge through the wall of its neck, of a plug closing the lower end of the neck, a tube carried by said plug and extending up through the neck and body of the funnel, a rod mounted in said tube, a float carried by the lower end of the tube and protected by the plug, and an insulating-sleeve surrounding the funnel-neck, substantially as and for the purposes set forth.

3. The combination with a funnel having a discharge through the wall of its neck, of a plug closing the lower end of the neck, a tube carried by said plug and extending up through the neck and body of the funnel, a rod mounted in said tube, a float carried by the lower end of the tube and protected by the plug, a sight-opening being provided in said tube, and stops at the extreme ends of the sight-opening for limiting the vertical movements of the float, substantially as and for the purposes set forth.

This specification signed and witnessed this 13th day of November, 1902.

THOS. A. EDISON.

Witnesses:

FRANK L. DYER,
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